

ACTIVE ENCLOSURE FOR COMPUTING DEVICE

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates generally to a computing device. More particularly, the present invention relates to improved features for changing the appearance of a computing device.

[0003] 2. Description of the Related Art

[0004] Most computing devices, including portable computers and desktop computers, give feedback to its user via a display screen or speakers. As is generally well known, display screens are used to display textual or graphical information to a user and speakers are used to output sound to the user. For example, display screens may be used to display a graphical user interface (GUI) and speakers may be used to output music or audio messages. Computing devices also give feedback to users via small indicators positioned on the computing device. By way of example, some indicators use light to indicate that a computing device (or the display screen of the computing device) is turned on/off or that a disk drive is reading or writing data to a disk. Although displays, speakers and indicators work well, they are limited to the type of feedback they give a user. For example, while playing a movie with a DVD drive of a computing device, the display screen only outputs the video associated with the movie, the speaker only outputs the audio associated with the movie, and the indicator only indicates that a movie is playing the DVD drive. Thus, it would be desirable to provide additional feedback to a user.

[0005] Computing devices also have housings that enclose the components and circuitry associated with operating the computing devices. Housings generally serve to shield and protect the components and circuitry from adverse conditions such as impact and dust. In some cases, the housings are configured to surround all the components of the computing device while in other cases the housings are configured to surround individual or a subset of components. For example, a housing may be used to enclose the central processing unit (CPU), display screen, disk drive, and speaker to form a single unit. As another example, a plurality of different housings may be used to individually enclose the CPU, display screen, disk drive and speakers to form a plurality of individual units.

[0006] As is generally well known, housings for computing devices in particular product lines are typically manufactured with the same appearance, i.e., they look the same. For example, housings from a particular product line may have the same box-like shape and/or the same neutral color. This can be discouraging to computer users who desire computers that are more personalized or to computer users who desire computers that are different than another user's computer. Recently, manufacturers have attempted to remedy this problem by offering brightly colored or translucent housings for computing devices. For example, some computer and telephone manufacturers now sell a variety of housings, which have different colors and patterns. By way of example, the iMAC® computer, which is produced by Apple Computer of Cupertino, Calif., is available in various colors and patterns.

[0007] Although these recent advances make substantial inroads to overcoming the same old appearance, the housings for the computing device remain passive structures that exhibit a non-adaptable or non-changing appearance. That is, a colored or patterned housing has a single color or pattern associated therewith that does not change overtime.

[0008] External lights have been used in some devices associated with displaying video to enhance the viewing experience of the video. Unfortunately, however, none of the external lights have been capable of changing the visual appearance of the device housing. That is, the external lights are typically located outside the periphery of the housing and are typically arranged to alter the environment in which the video is shown rather than the device housing itself (the appearance of the housing remains the same even with the use of lights).

[0009] Thus, there is a need for improvements in appearances of housings for computing devices.

SUMMARY OF THE INVENTION

[0010] The invention relates, in one embodiment, to a computing device. The computing device includes an illuminable housing having a housing wall configured to allow the passage of light. The computing device also includes a light emitting device disposed inside the illuminable housing. The light emitting device is configured to produce a light effect that alters the ornamental appearance of the computing device.

[0011] The invention relates, in another embodiment, to a computer system having a housing for enclosing at least one component of the computer system. The housing has a light passing wall. The computer system includes a light source disposed inside the housing. The light source is configured to generate light. The computer system also includes a light controller operatively coupled to the light source. The light source controller is configured to control the light source so as to illuminate at least a portion of the light passing wall of the housing with the light generated by the light source.

[0012] The invention relates, in another embodiment, to a general purpose computer having the ability to alter its ornamental appearance. The general purpose computer includes a housing. The general purpose computer also includes a computer component disposed inside the housing. The general purpose computer further includes a light arrangement disposed inside the housing. The light arrangement is configured to illuminate a substantial portion of the housing so as to alter the ornamental appearance of the housing.

[0013] The invention relates, in another embodiment, to a general purpose computer. The general purpose computer includes a housing including one or more walls that define the outer peripheral form of the general purpose computer. One of the walls has an illuminable portion configured to allow the passage of light therein. The general purpose computer also includes a light emitting device enclosed by the housing. The light emitting device is configured to generate light so as to illuminate at least a portion of the light passing wall thus altering the ornamental appearance of the general purpose computer. The general purpose computer further includes a processor enclosed by the housing. The processor is configured to at least partially control the operations of the general purpose computer.